

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

TITLE V/SYNTHETIC MINOR
DRAFT PERMIT NO. V-06-041
PUBLISHERS PRINTING COMPANY-SHEPHERDSVILLE FACILITY
SHEPHERDSVILLE, KY.
FROUGH SHERWANI, REVIEWER
SOURCE I. D. #: 21-029-00019
SOURCE A. I. #: 469
ACTIVITY I. D. #: APE20050002

On October 04, 2005, the source applied to the Division for the renewal of their Title V permit, V-99-063. In addition, the source has requested the following changes:

- Combining the bindery parts cleaner and bucket cleaner as cold solvent cleaner because they are identified as using the same cold solvent (Insignificant Activity);
- Adding Co Ray Vac radiant comfort heaters (Insignificant Activity);
- Adding 18000 gallon propane tank (Insignificant Activity);
- Eleven natural gas /propane heaters that were previously un-reported (Insignificant Activity);

On December 13, 2005, the source submitted an application proposing to replace the “big metal containers with a fake bottom” with “55 gallon drums with lids”. Those drums will be used to collect soiled rags that have been used to wash the blankets on the printing presses.

November 03, 2003, the source applied for the replacement of dust collector system with a GF Puhl collector. The Division issued an “Off Permit Change” letter for the replacement.

SOURCE DESCRIPTION:

Publishers Printing Company is an offset lithographic paper printing plant which prints magazines. Printing takes place on ten offset lithographic presses each with a natural gas fired dryer. Insignificant activities consist of a waste paper cyclone and dust collector system, small hot melt gluers, ink jet printing and head cleaning, two magazine glueing machines, three cooling towers, three chillers, cold solvent cleaner, non process space and water heaters, propane tank (18,000 gallons), 39 Co Ray Vac Radiant Comfort heaters (40, 000 Btu/hr each, natural gas/propane), eleven (11) space heaters (Total 1.66 mmBtu/hr, three @ 80,000 Btu/hr, two 115,000 Btu/hr two @ 195, 000 Btu/hr and four @ 200,000 Btu/hr, natural gas/propane).

COMMENTS:

Permit V-99-063 allowed alternative operating scenarios, in which the source could operate the ten (10) presses using the existing condenser/filter system to control the VOC emissions until the installation and start –up of the new Meg TecSystems Cleanswitch CS-250-955 regenerative thermal

oxidizer (RTO). The source has replaced the condensed/filter system with the RTO.

The new RTO shall have following requirement.

1. The permittee shall retest the RTO at least once during the life of this new permit;
2. Each press and the control device shall be interlocked at all times during press operation;
3. Pursuant to 401 KAR 50:012, Section 1(2), the permittee shall operate the Regenerative Thermal Oxidizer (RTO) at all times printing is being performed;
4. RTO shall have 90% VOC destruction efficiency, controlling each press' dryer exhaust;
5. Negative pressure shall be maintained at each dryer's exhaust inlet when the corresponding press is in operation.

Type of control and efficiency

The source has Meg TecSystems Cleanswitch CS-250-955 regenerative thermal oxidizer (RTO) to control VOC emissions from all ten (10) presses.

Regenerative Thermal Oxidizer (RTO):	MEGTEC "Clean Switch CS-250"
Destruction Efficiency:	99.5 % tested on May 28, 2002
Rated Capacity:	4.0 mmBtu/hr
Primary Fuel:	Natural Gas
Secondary Fuel	Propane

Emission factors and their source:

Emissions from the offset lithographic presses were calculated using the EPA document "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing". Emissions from the natural gas dryers were calculated using AP42, 1.4. The insignificant activities were certified by the company as being insignificant.

Applicable regulation:

The presses are not subject to an individual regulation, however, VOC emissions from Press 442 have a synthetic minor limit to preclude non-attainment area review based on earlier determinations. This will stay in place on this permit.

401 KAR 50:012, General application

401 KAR 59:185, New Solvent Metal cleaning equipment:

The cold solvent cleaner is exempt from the standard of 401 KAR 59:185 under Section 8.

Precluded Regulations:

401 KAR 51:052. Review of new sources in or impacting upon non-attainment areas

VOC emissions from Press Emission Point 3 (Press 442) shall not equal or exceed 40 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:052, Review of new sources in or impacting upon non attainment areas

EMISSION AND OPERATING CAPS DESCRIPTION:

1. VOC emissions from Press Emission Point 3 (Press 442) shall not equal or exceed 40 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:052, Review of new sources in or impacting upon non attainment areas;
2. Fountain solution as applied containing less than 3% by weight alcohol substitutes and containing no alcohol and no other VOC's
3. Blanket wash with a vapor pressure of less than 10 mmHg at 20 degrees C.
4. Negative pressure shall be maintained at each dryer's exhaust inlet when the corresponding press is in operation.
5. The permittee shall retest the RTO at least once during the life of this new permit;
6. Each press and the control device shall be interlocked at all times during press operation;
7. Pursuant to 401 KAR 50:012, Section 1(2), the permittee shall operate the Regenerative Thermal Oxidizer (RTO) at all times printing is being performed;
8. RTO shall have 90% VOC destruction efficiency, controlling each press' dryer exhaust.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.